RECORD OF DECISION

for the Proposed Issuance of Section 10(a)(1)(B) Incidental Take Permits Associated with the Natomas Basin Habitat Conservation Plan

I. SUMMARY

This Record of Decision (ROD) was developed by the U.S. Fish and Wildlife Service (Service) in compliance with the agency decision-making requirements of the National Environmental Policy Act of 1969, as amended (NEPA, 40 C.F.R. 1505.2). The purpose of this ROD is to document the decision of the Service in response to three applications for Incidental Take Permits (Permits) under section 10(a) of the Endangered Species Act of 1973, as amended (ESA); based on the submission of the Natomas Basin Habitat Conservation Plan (NBHCP) by the City of Sacramento (City), Sutter County (Sutter), and Natomas Basin Conservancy (Conservancy) in the Natomas Basin, Sacramento and Sutter Counties, California.

The proposed issuance of Permits is a federal action subject to review under NEPA. The Service, at the direction of the Secretary of the Interior, prepared a draft and final Environmental Impact Statement (EIS) in compliance with NEPA. The Service prepared these documents jointly with the City and Sutter (Land Use Agencies) in fulfillment of their responsibilities under the California Environmental Quality Act (CEQA). The joint final "Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) and the NBHCP describes in detail the proposed action by the Service, and the Land Use Agencies, and alternatives to those actions.

The Service intends to achieve the following objectives with this project: to protect 22 species (Covered Species) and their habitats that occur or may in the future occur in the Natomas Basin in accordance with the federal and state Endangered Species Acts (ESA's); to allow incidental take of 15 animal species either currently listed as threatened or endangered under the ESA or that may become listed during the 50 year permit terms; and to provide assurances to the permit applicants under the Service's "No Surprises" rule codified at 50 C.F.R. 17.22(b)(5) and 17.32(b)(5) for each of the 22 Covered Species.

This ROD: a) provides background information about the development of the NBHCP; b) briefly describes the proposed Project; c) describes the process for obtaining, reviewing and responding to public comments on the draft NBHCP; d) explains changes made between the draft and final versions of the NBHCP; e) describes alternatives to the project considered in the EIS/EIR in reaching the decision; f) states the Secretary's decision; g) presents the rationale for the decision and describes its implementation; and h) states whether all practical means to avoid or minimize environmental harm from implementation of the selected alternative have been adopted (40 CFR 1505.2).

Documents used in preparation of this ROD include: the August 2002, Draft and April 2003, Final NBHCP (City *et al.* 2002, 2003); the August 2002, Draft and April 2003, Final NBHCP

EIS/EIR (Service 2002, 2003a); April 2003, Implementation Agreement (IA) (City *et al.* 2003); the Service's June 2003, Biological/Conference Opinion on the Permit application (Service 2003b); and, the Service's June 2003, Findings on the permit applications (Service 2003c). All of these documents are incorporated by reference as described in 40 CFR 1508.13.

In addition to the City, Sutter, and Conservancy (collectively referred to as the Applicants), the NBHCP was developed to support future permit applications by the Natomas Mutual Water Company (Natomas Mutual) and Reclamation District 1000 (RD 1000) (collectively referred to as the Water Agencies). However, because the Water Agencies have not actively participated in the development of the 2003 NBHCP since February 2002, the final plan does not necessarily reflect all of the measures that may be necessary to minimize and mitigate to the maximum extent practicable the impacts of take resulting from Water Agency covered activities.

II. BACKGROUND

The 2003 NBHCP is the culmination of almost a decade of regional conservation efforts in the Basin. In 1994, the Sacramento Area Flood Control Agency (SAFCA) proposed a flood control project for the Basin that required a permit from the U.S. Army Corps of Engineers (Corps). The Corps conditioned its permit for the flood control project on the preparation of a habitat conservation plan (HCP) for the Basin. The local land use agencies (City, Sutter, and Sacramento County), with additional participation by the water agencies (Reclamation District Number 1000 (RD 1000) and Natomas Central Mutual Water Company (Natomas Mutual), began preparing a HCP. In 1997, the City was the first to submit its application to the Service for an incidental take permit to authorize take of 26 Covered Species within its portion of the Natomas Basin. The other land use agencies did not apply for incidental take permits based on the NBHCP at that time.

In December 1997, the Service issued a Section 10(a)(1)(B) incidental take permit to the City. Environmental review of the City's 1997 HCP under the NEPA and CEQA consisted of an Environmental Assessment/Finding of No Significant Impact prepared by the Service (Service,1997a) and an Initial Study/Negative Declaration prepared by the City (City of Sacramento,1996), respectively.

Sutter and Sacramento County informally submitted draft HCPs to the Service in October 1998. The Service suspended review of their HCPs because a lawsuit was filed challenging the City's HCP and Permit. To date, Sacramento County has elected not to apply for an incidental take permit covering unincoporated County lands in the basin based on the 1997 NBHCP, the 2003 NBHCP or a separate HCP.

Because Sacramento County elected not to continue participation in the regional HCP effort, a separate HCP designed to fit within the structure of the regional NBHCP was prepared for Metro Air Park (MAP), a special planning area adjacent to Sacramento International Airport in the County of Sacramento that the County approved for industrial and commercial development. MAP comprises 1,983 acres of the 17,500 acres of planned urban development described in the

2003 NBHCP. The Service issued a Permit to the Metro Air Park Property Owners Association on February 21, 2002.

RD 1000 and Natomas Mutual, the Water Agencies, also participated in basin-wide habitat conservation planning efforts. On September 8, 1998, the Water Agencies submitted an incidental take permit application. In support of their applications, they proposed to use the 1997 NBHCP with additional revisions suggested by the Water Agencies.

In February 2000, the National Wildlife Federation and other plaintiffs filed suit against the Service's issuance of the Permit to the City (*National Wildlife Federation, et al. v. Babbitt*, (E.D.Cal.) (*NWF.v. Babbitt*). The plaintiffs claimed that the Service violated Sections 7 and 10 of the ESA in issuing the City's permit. In addition, the plaintiffs asserted that the Service violated NEPA by preparing an Environmental Assessment rather than an EIS.

In August 2000, the United States District Court for the Eastern District of California issued a *Memorandum of Opinion and Order* (Order). The Court ruled in favor of the plaintiffs on six of nine claims. Pursuant to a Settlement Agreement executed by the parties in the suit (effective May 10, 2001), the Order was modified to allow incidental take protection for limited land development within the City, with the provision of specific mitigation requirements.

In November 2000, the Water Agencies informally submitted a revised draft HCP and IA to the Service and CDFG. Thereafter, in early 2001, the Water Agencies rejoined the City, Sutter and the Conservancy in developing the draft revised NBHCP. Discussions among the Water Agencies, the other permit Applicants and the Wildlife Agencies continued throughout 2001 and early 2002 regarding the Water Agencies proposed conservation measures. The Water Agencies identified general conservation measures for operations, maintenance, and minor construction activities. A revised NOP/NOI noticing the involvement of the Water Agencies in the HCP process was published in local newspapers and in the *Federal Register* on August 18, 2001.

The City and Sutter, with involvement by the Water Agencies, prepared the 2002 draft NBHCP which corrected deficiencies in the original HCP identified by the district court in *NWF v. Babbitt*. In July 2002, the City, Sutter, and the Conservancy each submitted Permit applications, in accordance with ESA Section 10(a)(2)(A), based on the 2002 NBHCP. On August 16, 2002, the draft EIS/EIR, draft NBHCP and draft IA went out for public review for a period ending on December 5, 2002. The final EIS/EIR, final NBHCP and final IA went to the public for the 30-day cooling off period on May 2, 2003 through June 2, 2003. Refer to section V. Public Comment for more detail.

The Water Agencies have not applied for Permits based on the 2002 or 2003 NBHCP, at this time. The approval of the NBHCP with regard to the Permits applied for by the City or Sutter does not reflect a determination by the Service that the avoidance, minimization, and mitigation measures provided in the NBHCP to offset the impacts of take of the Water Agencies proposed covered activities are adequate. If the Water Agencies decide to apply for Permits in the future, their proposed activities and conservation measures will be subject to a separate review at that time.

III. PROJECT DESCRIPTION

Issuance of Incidental Take Permits

Statutory Framework

Section 10 of the ESA permits take (including harm, harassment, injury and/or mortality) of listed species incident to otherwise lawful activities provided the applicant's activities "will not appreciably reduce the likelihood of the survival and recovery of the [covered] species in the wild" and the applicant "minimizes and mitigates to the maximum extent practicable" the impact of take likely to result from its activities. In order to obtain such permission, the Land Use Agencies must submit a HCP that, in the judgement of the Service, meets these basic requirements as well as the other criteria stated in Section 10(a)(2)(B) of the ESA, including the requirement to ensure that adequate funding for the HCP will be provided.

Under the ESA and its implementing regulations, "take" of a listed species may arise from significant habitat modification that results in actual injury or death to the species. The Land Use Agencies Covered Activities would likely result in "take" of listed species. Therefore, the Land Use Agencies desire and need a Permit from the Service.

The Service has conducted a consultation and conference under Section 7 of the ESA on the proposed Permits, dated June 24, 2003. The Service has also adopted Findings on the proposed permits on June 27, 2003. In accordance with the Service's Section 7 biological opinion and conference opinion, Findings, and this Record of Decision, the Service has decided to issue Section 10(a)(1)(B) incidental take permits to the City, Sutter and the Conservancy for a term of 50 years.

Summary of the Final NBHCP - Project Description

The City, Sutter and the Conservancy submitted applications for incidental take permits under section 10(a)(1)(B) of the ESA. The applications request coverage under the permits for 22 species, seven of which are currently listed under the ESA. The Permits would cover incidental take for one endangered animal species vernal pool tadpole shrimp (*Lepidurus packardi*), and three threatened animal species giant garter snake (*Thamnophis gigas*)(snake), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)(beetle), and vernal pool fairy shrimp (*Branchinecta lynchi*). The Permits would also authorize the incidental take of one animal species formerly listed as threatened Aleutian Canada goose (*Branta canadensis leucopareia*)(goose), which was de-listed on March 20, 2001, one proposed species California tiger salamander (*Ambystoma californiense*)(salamander) and nine currently unlisted animal species - Swainson's hawk (*Buteo swainsoni*)(hawk), white-faced ibis (*Plegadis chihi*)(ibis), bank swallow (*Riparia riparia*)(swallow), tricolored blackbird (*Agelaius tricolor*)(blackbird), northwestern pond turtle (*Clemmys marmorata marmorata*)(turtle), loggerhead shrike (*Lanius ludovicianus*)(shrike), burrowing owl (*Athene cunicularia*)(owl), western spadefoot toad (*Spea hammondii*)(toad), and midvalley fairy shrimp (*Branchinecta mesovallensis*), should they

become listed in the future during the term of the permits. The Permits would become effective to authorize take of the currently unlisted Covered animal Species concurrent with their listing under the ESA. One endangered plant species Sacramento Orcutt grass (*Orcuttia viscida*), two threatened plant species Colusa grass (*Neostapfia colusana*) and slender Orcutt grass (*Orcuttia tenuis*) and four currently unlisted plants Boggs Lake hedge-hyssop (*Gratiola heterosepala*), delta tule pea (*Lathyrus jepsonii* var. *jepsonii*), legenere (*Legenere limosa*), and Sanford's arrowhead (*Sagittaria sanfordii*) would also be considered Covered Species and included on the Permits. Although take of plant species is not prohibited under the ESA and, therefore, cannot be authorized under an incidental take permit, the plant species would be included on the permits in recognition of the conservation benefits provided to the species under the NBHCP. Assurances provided under the "No Surprises" rule at 50 C.F.R. 17.3, 17.22(b)(5) and 17.32(b)(5) would extend to all Covered Species.

The Applicants have also requested incidental take authorization from the California Department Fish and Game for a total of 22 species protected under the California Endangered Species Act and/or CEQA.

Actions conducted under the NBHCP and IA are designed and conditioned to comply with the provisions of the Migratory Bird Treaty Act (MBTA) with strict avoidance measures for actions affecting MBTA-Covered Species such as the goose, hawk, ibis, swallow, blackbird, shrike, and owl. The MBTA prohibits the taking, killing, or possessing of migratory birds. The MBTA identifies a variety of prohibited actions including the taking of individual birds, young, feathers, eggs, nests, etc. There are currently no MBTA Covered Species that are listed under the ESA and subject to a Special Purpose Permit at this time. Should any of the MBTA covered species become listed under the ESA during the life of the permits, the Permits would also constitute an MBTA Special Purpose Permit for that species for a three-year term as specified under 50 C.F.R.10, subject to renewal by the City, Sutter County, and the Conservancy.

The Permit would authorize for a period of 50 years, the incidental take of Covered Species associated with the conversion of up to 15,517 acres (City = 8,050 acres, Sutter = 7,467 acres) of agricultural or vacant lands that currently, or in the future, could provide habitat for the Covered Species within the Permit Areas in the Natomas Basin (Basin). The conversion of these lands would occur as a result of urban development, an activity addressed and covered by the NBHCP, and would result in impacts to Covered Species, including take of species currently listed under the ESA. In addition, take resulting from the implementation of management activities on established reserve lands would be authorized by the Conservancy's Permit. The primary mitigation for the impacts of take resulting from urban development on Covered Species and their habitat is the collection and use of mitigation fees to acquire preserve, enhance and restore 0.5-acre of habitat land for each 1.0-acre of development. The total habitat loss for Covered Species, as proposed in the NBHCP, would be mitigated by the preservation and enhancement of 7,758.5 acres of high quality habitat reserve lands that will be specifically managed in perpetuity for the Covered Species. The NBHCP also includes minimization measures to reduce impacts on Covered Species resulting from covered activities.

NBHCP Conservation Program

The primary biological goal of the NBHCP is to create a system of reserves, with both wetland and upland components, that will contribute to the maintenance of viable populations of the giant garter snake, Swainson's hawk and other Covered Species in the basin. The NBHCP primarily focuses preservation efforts on the giant garter snake and Swainson's hawk. The habitat needs of many of the other Covered Species overlap significantly with the giant garter snake and the Swainson's hawk such that specific habitat requirements of the other Covered Species can be incorporated and met within the upland and wetland components of the reserves focused on providing Swainson's hawk and giant garter snake habitats. Specific consideration of the needs of the other Covered Species must be incorporated into the restoration, enhancement, and management plans as they are developed for each reserve site according to criteria provided in Chapter IV.D of the NBHCP.

For the City and Sutter, the primary mitigation to be accomplished comprises the progressive establishment and maintenance perpetuity of a system of biological reserves representing 0.5-acre of reserve land for each 1.0-acre developed to be managed for the benefit of all of the Covered Species. The Conservancy will be responsible for establishing and managing the mitigation reserves. Some species such as the vernal pool fairy shrimp, vernal pool tadpole shrimp, midvalley fairy shrimp, valley elderberry longhorn beetle, Bogg's Lake hedge hyssop, legenere, and Sacramento Orcutt grass do not have habitat needs that overlap significantly with the snake or hawk. In these cases, the Applicants have proposed other mitigation measures to mitigate the impacts of the proposed project on the species. For example, the Service may require that a land owner/developer avoid impacts to vernal pools or mitigate for such impacts by purchasing vernal pool preservation and creation credits from a Service-approved conservation bank.

The City and Sutter will each be required to mitigate the impacts of their Covered Activities independently. Thus, if either one of the Permits, other than the Permit issued to the Conservancy, is revoked, the other Permits would remain in effect. However, the conservation strategy adopted in the NBHCP reflects a region-wide assessment of, and mitigation for, impacts to the Covered Species; even though the level of impacts to particular Covered Species differs between each jurisdiction. The withdrawal of one of the jurisdictions from the plan is considered a Changed Circumstance under the plan which would trigger a review of the mitigation lands relative to the types of habitat which have been and are projected to be impacted by the remaining jurisdiction and, if necessary, modification of reserve system management to ensure that reserve lands adequately mitigate for the types of habitat and impacts to species occurring in the remaining land use jurisdiction. Because the Conservancy, in carrying out its reserve acquisition and management activities, is acting on behalf of and is controlled by the City and Sutter, noncompliance by the Conservancy with the terms and conditions of its Permits, the NBHCP or IA, shall be considered a failure of the City and Sutter to comply with their obligations under the NBHCP and may result in suspension and/or revocation of their respective Permits.

The effectiveness of the NBHCP's Operating Conservation Program to adequately minimize and mitigate the effects of take of the Covered Species due to authorized development depends on the City and Sutter limiting total development within their respective Permit Areas to a

combined total of 15,517 acres. In addition, the Operating Conservation Program and the NBHCP's effects analysis account for a combined total of 17,500 acres of Planned Development occurring in the Basin (i.e., 15,517 acres within the City and Sutter's Permit Areas and 1,983 acres for the Metro Air Park development in Sacramento County).

The NBHCP conservation strategy comprises: (1) identification and implementation of incidental take avoidance and minimization measures to minimize impacts to species covered by the HCP; (2) establishment, enhancement, restoration, and management of up to 8,750 acres of reserves in perpetuity for the species covered by the NBHCP; and (3) establishment of a monitoring and reporting plan to gauge the anticipated biological success of the NBHCP and to provide information for the Adaptive Management Plan which is designed to improve the biological success of the NBHCP as new information becomes available or conditions change.

The measures specified under the NBHCP are designed to minimize and mitigate the impacts of take of the Covered Species and contribute to their conservation. The adequacy of the mitigation is explained in detail in the Findings document and the Biological/Conference Opinion (Service 2003 b, c). The City, Sutter, the Conservancy, CDFG and the Service will each sign the Implementation Agreement, a formal agreement among the parties that binds each party to carry out the NBHCP and provides recourse and remedies should any party fail to perform its obligations under the plan. The IA will further ensure that the NBHCP will be fully implemented.

Enforcement and Monitoring

The NBHCP, the IA, and the Permits, as well as the Service's permit administration regulations at 50 C.F.R. Parts 13 and 17 identify monitoring obligations and enforcement mechanisms to ensure the plan is properly implemented. Monitoring of the system of biological reserves will be performed by the Conservancy, with oversight and direction by biological experts, including Service and CDFG representatives, and will be funded by mitigation fees.

Activities Covered in the Permits

Activities proposed to be covered under the Permits are the otherwise lawful activities which are described in detail in Section I.N of the NBHCP and in the Biological and Conference Opinion (Service 2003b). These activities generally consist of urban development that converts vacant land or agricultural uses to residential, commercial, and industrial uses, including related public and private infrastructure development and improvements by the Land Use Agencies.

The City is seeking incidental take coverage for a total of 8,050 acres of authorized development located within the City's proposed Permit Area, including private and public urban development projects and associated infrastructure. Approximately ten of the total 7,758.5 acres covered by the City's Permit are for drainage improvements to widen the West Drain outside of the City limits, in Sacramento County. This area has already been disturbed in compliance with the 1997 NBHCP.

Sutter's proposed Permit would authorize incidental take coverage for the Covered Species within Sutter's Permit Area incident to urban development, public projects and associated infrastructure. Sutter is requesting incidental take coverage associated with the conversion of 7,467 acres of agricultural and vacant lands to urban development located within Sutter's Industrial/Commercial Reserve area, which is located in the southeast portion of Sutter County within the Basin. The 7,467 acres of urban development would be located within the proposed Sutter Permit Area, except for infrastructure improvements in Sacramento County.

There is currently one proposed Sutter County public facility project: drainage channel improvements to support the South Sutter County Specific Plan area. The proposed drainage improvements are located on land in Sacramento County outside the Sutter County Industrial/Commercial Reserve and involve expanding two existing RD 1000 drainage channels (East Drainage Canal and the Montna Drain) to accommodate additional storm water flows. These channels are located within Sacramento County immediately south of the Sutter-Sacramento County boundary. To the extent that these channels and their associated levees and access roads are expanded beyond the footprint of the existing facilities, Sutter will treat the expansion of these facilities as urban development subject to the provisions of the NBHCP. Such increases in the footprint of the drainage channels are considered part of Sutter's 7,467 acres of authorized development.

The Conservancy is seeking incidental take coverage associated with the acquisition, establishment and management of the system of habitat reserves that will be created by the Conservancy on behalf of the City, Sutter and other Potential Permittees throughout the Basin. Within its basin wide Permit Area, the Conservancy is seeking incidental take coverage for managing reserves; preservation, creation, restoration, and enhancement activities; and monitoring the HCP's success in meeting its biological goals.

Activities Not Covered by the Permits

The NBHCP specifically does not cover the following (see Section I.O of the NBHCP):

- 1. Agricultural Activities. Except as provided for the Conservancy's management of reserve lands, agricultural activities are not Covered Activities under the NBHCP and the NBHCP Permits.
- 2. Dredging. Except as provided for the Water Agencies' channel maintenance, dredging is not a Covered Activity under the NBHCP and the NBHCP Permits.
- 3. Additional Regulations. In addition to the Section 10(a)(1)(B) and CDFG Section 2081 permits the NBHCP Permittees shall also comply with all other applicable local, state and federal, regulations, laws or ordinances. This includes, but is not limited to the following: U.S. Army Corps of Engineers Clean Water Act Section 404 permits; State Water Quality Control Board/Regional Water Quality Control Board Section 401 water quality certification and/or waste discharge requirements; CDFG Streambed Alteration Agreements pursuant to Fish and Game Code Division 2, Chapter 6, Section 1600 *et. seq.*; State and Federal Departments of Transportation; U.S. Environmental Protection Agency and Department of Pesticide Regulation.
- 4. Relationship of Plan to Section 7 Consultations. Private or public actions that are Covered Activities under the NBHCP may also be subject to separate Section 7 review if those actions are authorized, carried out, or funded by federal agencies. Incidental take for Covered Activities carried out by the Permittees or third party developers acting under the authority of an urban development permit issued by either the City or Sutter County will be granted under the Permits and will be subject to the take mitigation, minimization and avoidance measures provided for under the NBHCP. Incidental take coverage for the federal action agency will be granted through the incidental take statement issued with a Service Section 7 biological opinion. The take authorization provided to the Permittee or third party developer by the incidental take permits will not be effective until the federal permit which triggered the Section 7 consultation has been issued and is effective.
- 5. Pesticide use. The Permits do not cover the use of pesticides.
- 6. Hunting. The Permits do not cover activities associated with hunting.

Time Line

The NBHCP is a 50-year plan intended to address the need to protect and conserve Covered Species and other biological resources within the NBHCP project area and throughout the Natomas Basin, while accommodating urban development permitted by the City's and Sutter's land use plans and policies.

IV. MAJOR ISSUES

The FEIS/EIR addressed five major issues: mitigation ratio, connectivity, Joint Vision, cumulative impacts, and Swainson's hawk foraging habitat.

Mitigation Ratio

The NBHCP's primary mitigation strategy is the preserving/enhancing/creating 0.5 acre of habitat reserves for each 1.0 acre of habitat developed. All of the 15,517 acres of land within the City's and Sutter's Permit Areas are considered to be habitat for at least one of the NBHCP's Covered Species. Therefore, if the City's and Sutter's Permit Areas are completely built out, 7,758.5 acres of habitat reserves will be created. The NBHCP also includes avoidance and/or minimization measures for each of the plan's Covered Species.

The Service believes the level of minimization and mitigation provided for in the NBHCP compensates for the impacts of take of each covered species that will or could potentially occur under the plan. The primary form of take of each of the covered species anticipated under the plan is in the form of harm resulting from the conversion of 15,517 acres of primarily agricultural or vacant lands in the basin to urban development. The 0.5:1 mitigation ratio and avoidance and minimization measures effectively minimize and mitigate the take. Therefore, a higher mitigation ratio, as suggested by many commentors, is not necessary. Furthermore, as discussed in the Findings, the Applicants have demonstrated that a higher mitigation ratio is not economically feasible.

Joint Vision

On December 10, 2002, the City and Sacramento County approved the Joint Vision, a Memorandum of Understanding between the City and County that will: (1) identify areas for development and open space in the unincorporated portion of the Natomas Basin within Sacramento County; (2) establish a revenue sharing agreement; (3) designate the City as the agent for planning new development; and (4) designate Sacramento County as the agent for open space and rural land uses. The Joint Vision states that should the City or Sacramento County pursue any additional development in the Natomas Basin, they will "propose and consider a new, separate or enhanced Habitat Conservation Plan to address development impacts to protected species..." and that any further development in the Basin would require "additional or alternative mitigation, and additional environmental analysis." Many comments stated that the Service should analyze the Joint Vision as a cumulative effect. As discussed in Sections 3.1.3 and 3.1.4 of the FEIS/EIR, the Joint Vision is only a Memorandum of Understanding and no boundaries or land use changes have been specified, much less approved. The likelihood of future development as a result of the Joint Vision process is highly speculative and uncertain. Such development is therefore not "reasonably foreseeable" and is not treated as a cumulative effect of the proposed action.

Cumulative Impacts

Section 3.1.4 of the FEIR/EIS discusses a number of development projects including, but not limited to, Alleghany Properties, Northern Territories/Brookfield Land Company, expansion of the Sacramento International Airport, and a private university proposal, that are outside of the

development analyzed in the NBHCP and could potentially occur in the Basin in the future. However none of these potential development projects is reasonably foreseeable under NEPA or reasonably certain to occur within the action area of the NBHCP under ESA for the following reasons: (1) these areas are not planned for urban development under adopted land use plans; (2) these areas are located outside of the City's Sphere of Influence, the City of Sacramento city limits and Sacramento County's Urban Services Boundary; (3) no urban services, such as sewage, are available to serve development; and (4) other significant legal and planning hurdles must be overcome before development could proceed. In addition, neither the City, Sutter, nor Sacramento County are considering proposed amendments to their general plans that would result in additional urban development in the Natomas Basin. A detailed discussion of cumulative impacts is found in Section 3.1.4 of the FEIR/EIS.

Swainson's Hawk Foraging Habitat

Commentors expressed concern that the NBHCP's mitigation measures do not adequately mitigate the impacts of the removal of approximately 40 percent of the Basin's total foraging habitat for the Swainson's hawk. As discussed in Section 3.1.5 of the FEIS/EIR and the biological/conference opinion, the Service believes that the Applicants' mitigation measures do mitigate for the impacts of take resulting from the loss of foraging habitat. Much of the existing habitat that will be lost is not available to the hawk throughout much of the nesting season, is greater than one mile from the majority of the Basin's nest trees, and is not considered highquality habitat. In contrast, the proposed mitigation program will provide high-quality foraging habitat that is available throughout the hawk's nesting season. In addition, because of the priorities established for the acquisition of Conservancy upland reserves, the majority of these high-quality reserve lands will be in close proximity to the majority of the Basin's Swainson's nest trees. So, the effective mitigation ratio is higher than the actual mitigation ratio because the upland reserve lands are of greater quality than the habitat being impacted. Also, the City and Sutter have also committed to not developing within the Swainson's hawk zone, with the exception of 252 acres that was previously authorized by the City. The Service found in its biological/conference opinion that because of the varying quality of that habitat and its limited availability to the species during the nesting season, the loss of foraging habitat will not result in significant adverse effects to the hawks in the basin. Substantial amounts of foraging habitat will remain in the basin as well as abundant foraging habitat in nearby Yolo County, and the proposed action will result in the addition of high-quality foraging habitat managed specifically to benefit the hawk (i.e., located in close proximity to nest trees, managed to produce mots of hawk prey, available throughout the hawk's time in the Basin, etc.).

Connectivity

Some commentors expressed concern about the NBHCP's effects on connectivity as it pertains to the snake in the Basin. More specifically, some commenters were concerned that implementation of the proposed project would result in a situation where snakes could not move from one portion of the Basin to another. The June 24, 2003, biological opinion for the proposed project examined the issue of connectivity in detail and found that implementation of the proposed project would have no significant effect on connectivity among the three important snake areas in the basin and that connectivity between Conservancy reserves was adequately

assured. In some instances the current level of connectivity between the snake areas will be reduced due to the loss of a portion of the drainage canals and ditches within the City and Sutter permit areas; however, essential connectivity corridors will remain. Canals are required for flood control throughout the basin, and agriculture, which depends on canals and ditches for water delivery and irrigation, is expected to persist in the basin throughout the permit term. The plan is designed to insure that connectivity is maintained within and among the system of habitat reserves and adjacent agricultural lands to facilitate snake movement within the basin. Under the plan, the City and Sutter are required to ensure such connectivity is maintained. Among other measures, the plan provides for the outright acquisition of canals, the granting of Memoranda of Agreement, transfer easements or lands in fee to the Conservancy, and relocation of unimproved reserve components as necessary to maintain connectivity. The consolidation of mitigation lands into large reserve blocks will also help to reduce the number of connections required. The maintenance of important connectivity corridors will also reduce the level of take of giant garter snakes resulting from the plan.

V. PUBLIC COMMENT

A Notice of Intent to prepare an EIS for the federal action associated with the project was published in the **Federal Register** on December 18, 2000 (65 FR 79115). Public comments on the scope of the alternatives and environmental effects to be examined for the proposed project were requested by January 16, 2001. Thirty-two comment letters were received.

A second Notice of Intent was published in the **Federal Register** on August 17, 2001 (66 FR 43267), which addressed the addition of the Water Agencies as participants in the environmental document. Public comments on the addition of the Water Agencies were requested by September 17, 2001. Two comment letters were received.

A Notice of Availability of the Draft EIR/EIS, with a public review period of 60 days, was published in the **Federal Register** on August 16, 2002 (67 FR 53581). Comments were requested by October 16, 2002. An extension to the public review period was published by amended Notices of Availability, and the comment period was extended to December 5, 2002. Twenty-five comment letters were received (Attachment 1 to the Final EIR/EIS). A response to each comment is included in the Final EIR/EIS as Attachment 2.

A Notice of Availability of a Final EIR/EIS was published in the **Federal Register** on May 2, 2003 (68 FR 23457). Eight comment letters were received. None of the comments received presented significant new issues or identified effects of the action that were not previously addressed in the Draft and Final EIR/EISs and in the responses to comments on the Draft EIR/EIS included in the Final EIR/EIS. The eight comment letters and the Service's response to the letters is included as Appendix A and Appendix B, respectively, to this Record of Decision.

VI. CHANGES BETWEEN THE DRAFT AND FINAL HCP

The public comment period on the draft NBHCP (City *et al.* 2002) and its associated environmental documents enabled the Service to gather comments from interested parties. The process of reviewing and considering these comments led to the development of changes to the original proposed NBHCP. These changes are clarifications; updates; and additional minimization, mitigation, and monitoring measures. The Final EIS/EIR and NBHCP were made available to the public on May 2, 2003 (68 **FR** 23457). The main substantive changes from the draft to the final NBHCP are summarized as follows:

- 1. Sections IV.C.1, V.A.5, and V.B.4.a include updated conservation measures that improve protections for the snake.
- 2. Section IV.C.1 includes an expanded analysis with regard to Swainson's hawk foraging habitat.
- 3. Section IV.C.2.c addresses potential sale or transfer of mitigation reserve lands.
- 4. Section V.A.4.a includes survey protocols for Covered vernal pool plant and animal species.
- 5. Sections VI.E.2 and VI.E.3 include refined biological monitoring measures. And
- 6. Section VI.F.3 includes improved database management measures.

On May 13, 2003, the City approved the Final NBHCP, with three changes that will improve protections for Covered Species (Ordinance Number 2003-290). These changes are:

- 1. No mitigation lands will be acquired in Area B, an area outside of the Basin that had been proposed to be used for habitat reserves in some instances. All mitigation lands must now be acquired within the Natomas Basin.
- 2. The City may exercise its discretion to require developer/land owners to dedicate mitigation land in lieu of the land acquisition component of the mitigation fee prior to issuance of an Urban Development Permit.
- 3. Land owners within the City's Permit Area will be notified annually if they have a Swainson's nest tree on their property. The Notice will identify the nest tree and alert the owner to the specific mitigation measures prohibiting the owner from removing the nest tree prior to future Authorized Development of the property.

Sutter approved the Final NBHCP (Resolution Number 03-030) on May 13, 2003. On June 10, 2003, Sutter approved a second resolution to make Sutter's obligations consistent with those of the City. Changes included in the second resolution include:

1. No mitigation lands will be acquired in Area B.

- 2. Sutter may exercise its discretion to require developer/land owners to dedicate mitigation land in lieu of the land acquisition component of the mitigation fees prior to issuance of an Urban Development Permit.
- 3. Land owners within Sutter's Permit Area will be notified annually if they have a Swainson's' nest tree on their property. The notice will identify the nest tree and alert the owner to the specific mitigation measures prohibiting the owner form removing the nest tree prior to future Authorized Development of the property.

VII. THE ALTERNATIVES

Six alternatives including the NBHCP and five additional alternatives, were identified and analyzed in the Draft and Final EIS/EIR. These include: (1) the NBHCP (proposed action); (2) Increased Mitigation Alternative; (3) Habitat-Based Mitigation Alternative; (4) Reserve Zones Alternative; (5) Reduced Potential for Incidental Take Alternative; and (6) No Action Alternative.

Following is a brief description of the preferred NBHCP alternative, plus the five additional alternatives. A detailed description of the alternatives appears in the NBHCP EIS.

1. <u>Proposed and NEPA Preferred NBHCP:</u>

Under this alternative, the proposed NBHCP described above under Project Description, would be implemented. This alternative establishes a comprehensive multi-species conservation program that minimizes incidental take of the covered animal species and loss of covered plant species in the permit areas and provides mitigation for the impacts of covered activities on the Covered Species and their habitat. The goal of the conservation strategy is to create high value habitat out of currently vacant lands or lands currently in agricultural production. During the 50 year permit term incidental take of Covered species would be authorized on up to 15,517 (City = 8,050 acres, Sutter = 7,467 acres) of agricultural or vacant lands that currently, or in the future, could provide habitat for the Covered Species and on 7,758 acres of reserve lands incidental to species and habitat management conservation activities. The regional, multiple species approach eliminates the fragmented, inefficient process of project-by-project review, processing of permits for species as they become listed, and relatively smaller scale, less comprehensive, implementation of mitigation measures. The NBHCP meets the statutory criteria for issuance of a Section 10(a)(1)(B) Incidental Take Permit under the ESA (Service 2003c) as discussed further in the Service's Findings.

2. <u>Increased Mitigation Alternative</u>:

Under this alternative, the mitigation ratio for developed land would be increased from 0.5:1 to 1:1. The development limit for the City, Sutter County, and Metro Air Park would remain the same as for the NBHCP Alternative, but this amount of development would result in the acquisition of twice as much mitigation land. The requirement for one contiguous block of 2,500

acres would not change, and other reserve lands would be acquired to ensure that they form 400-acre contiguous blocks.

Avoidance and minimization measures for construction and management activities would be the same as under the NBHCP Alternative. This alternative would result in the loss of additional farm lands (as they are converted to reserves). The Service does not believe a 1 to 1 mitigation ratio is appropriate because it is not commensurate with the level and impacts of take likely to result from implementation of the NBHCP. Given the variable quality of habitat that currently exists on the undeveloped agricultural and vacant lands, requiring a 1 to 1 mitigation ratio that ignores these habitat variations would result in significantly greater mitigation - at least in the form of land set asides - than the Service's analysis of impacts of take requires. The financial analysis prepared by EPS also indicates that adopting a 1 to 1 mitigation ratio, in combination with all of the other conservation measures included in the NBHCP's Operating Conservation Program, is impracticable from a funding perspective. While leaving the lands as rice fields or other agricultural crops would decrease plan costs, the Service believes that active management, enhancement and restoration of the mitigation lands to benefit the covered species is a critical component of a successful conservation strategy for these species. Therefore, the Service does not believe a 1 to 1 mitigation ratio is either necessary to mitigate the impacts of take of the Covered Species or practicable from an economic standpoint.

3. <u>Environmentally Preferred and Superior Habitat-Based Mitigation Alternative</u>:

Under this Alternative, the mitigation ratio to compensate for urban development impacts would be based on the habitat value of the lands to be developed. Site-specific management plans would be developed as the reserve lands are acquired, and these reserve lands would be subject to the same requirements as under the NBHCP alternative. For this alternative, mitigation requirements would be based on the habitat needs of the two key species, giant garter snakes and Swainson's hawks. Giant garter snake mitigation ratios would be consistent with the Service's Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Actions. Swainson's hawk mitigation ratios are based on CDFG's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California. Avoidance and minimization measures for construction and management activities would be the same as under the NBHCP alternative. About twice as much land would be incorporated into the habitat reserves under this alternative compared with the NBHCP alternative. As stated for the Increased Mitigation Alternative, the 0.5:1 ratio has been determined to effectively minimize and mitigate the impacts of take resulting from planned urban development in the basin. The habitat based mitigation ratio uses standard categories of existing land uses in the basin, including rice fields, canals, and other lands within 10 miles of an active nest to predict future habitat conditions. As such it represents a crude approximation of habitat potentially available to the giant garter snake, Swainson's hawk and other covered species. The habitat based alternative results in a total mitigation land requirement that is very similar to the 1 to 1 mitigation ratio discussed under Alternative 1. As with Alternative 1, the habitat based alternative would be economically infeasible. The mitigation fees required to both acquire mitigation lands at an approximate 1 to 1 mitigation ratio and also implement the habitat enhancement, restoration, management and monitoring elements of the NBHCP on these lands would likely increase the cost burden on development in the basin beyond the recognized industry yardstick for feasibility. If the habitat

enhancement and management features of the plan's conservation strategy were eliminated in order to make this alternative more feasible, the Service believes the conservation value of the alternative would significantly suffer. The Service believes that an active habitat restoration and management plan imposed on fewer mitigation lands will ultimately yield a higher conservation benefit than the acquisition of more rice fields and other agricultural and vacant lands for the Covered Species.

Additionally, the habitat based mitigation alternative could be difficult to implement from a practical standpoint and could actually result in less mitigation habitat than the proposed plan. This is because almost all of the existing habitat for the covered species in the basin is provided by agricultural lands, either rice fields, canals and irrigation ditches, or other agricultural crops. Very little if any natural habitat remains in the basin. Thus a habitat based alternative could create a perverse incentive for agricultural producers to simply quit farming their lands in advance of development in order to eliminate habitat for the covered species on their properties. This would result in less extant habitat for the species prior to development, less mitigation imposed on the developers, and ultimately less mitigation land for the species as development occurs. In contrast to the current plan which distributes the costs of mitigation evenly across all lands in the basin, the habitat based alternative would target those landowners who, by virtue of their farming practices, currently provide the vast majority of habitat which allows the Covered Species to maintain viable populations in the basin.

4. Reserve Zones Alternative:

This Alternative identifies specific reserve zones that would be emphasized in reserve acquisition efforts. These reserve zones would be outside the North and South Natomas Community Plan areas, and outside of Sutter County's Industrial-Commercial Reserve. Land acquisition would occur based on a 0.5:1 mitigation ratio as under the Proposed Action. This Alternative differs from the NBHCP alternative, however, in that reserve acquisition would focus on five overlapping zones that are distributed throughout the Natomas Basin based on the habitat needs of giant garter snakes and Swainson's hawks, rather than on the NBHCP's alternative broad requirement to mitigate generally within the basin. Special conditions regarding the size and distribution of reserve blocks within the five zones would apply. The effects of this Alternative would be the same as those from the NBHCP's alternative. The Service does not believe an alternative which identifies specific zones for reserve acquisition is biologically necessary or economically practicable. The goal of the conservation strategy is to create high value habitat out of currently vacant lands or lands currently in agricultural production. The biological success of the plan does not depend on conservation of particular tracts of land which current information may indicate may support snakes or another Covered Species (with the exception of vernal pool species which have a separate mitigation program). Rotating crop patterns, fallowing of fields, canal maintenance activities, etc., can result in changing patterns of habitat use by the Covered Species from year to year and season to season. The Service believes that the criteria for reserve land acquisition specified in the plan will result in high quality habitat for the Covered Species throughout the basin. In addition, this conservation strategy which focuses solely on the snake and Swainson's hawk could compromise the plan's overall conservation strategy which is to protect and provide opportunities for expansion of other Covered Species in the basin. Apart from biological

considerations, identification of specific areas for reserve acquisition results in significantly increased land values in those areas. The targeting of specific lands in Sacramento County under the recent Settlement Agreement in *NWF v. Babbitt*, dramatically illustrates this point. As a result of the settlement, the City was compelled to impose an approximate \$4,000 premium on the land acquisition component of the mitigation fee. The City and Sutter recently agreed to restrict the acquisition of all mitigation lands to the Natomas Basin. The Service supports this modification to the plan because it will result in more in basin habitat to support viable populations of the Swainson's hawk and giant garter snake; though it will also likely cause the cost of mitigation lands to increase. Further restriction of acquisition to specific areas in the basin, would, as EPS and the City's recent experience found, likely increase land acquisition costs even further, assuming landowners within these zones could be persuaded to sell their lands. The reserve zones alternative is not biologically necessary to mitigate for the impacts of take under the NBHCP and would compromise the feasibility of the NBHCP.

5. Reduced Potential for Incidental Take Alternative:

Under this Alternative, lands that may be developed as a result of the proposed action have been reduced by 5,500 acres. Consequently, impacts of the proposed action would reduce by 5,500 acres. Development of 12,000 acres under this Alternative (5,197 acres in the City of Sacramento, 4,820 acres in Sutter County, and 1,983 acres for Metro Air Park) would result in the acquisition of 6,000 acres of habitat reserves, at 0.5:1 mitigation ratio. Acquisition criteria, management, oversight, and other aspects of the planned habitat reserve system would remain the same as described in the NBHCP. This alternative is not deemed practicable to the Land Use Agencies because it would not be consistent with approved land use plans and development planned within their respective jurisdictions within the basin. While a reduced development scenario would reduce impacts to the Covered Species, the conservation strategy proposed under the NBHCP effectively mitigates impacts to the Covered Species while accommodating compatible urban development previously approved by the jurisdictions. This alternative is neither biologically necessary nor, from the standpoint of the permit Applicants, practicable. This alternative would not only result in fewer mitigation lands but also in higher mitigation fees because the economies of scale in administration and management of reserve lands would be less. The analysis of this alternative by EPS indicates it would require higher mitigation fees that could impair the feasibility of the overall plan.

6. No Action Alternative:

Under the No Action Alternative, no Section 10(a)(1)(B) permit would be issued for take of listed species as a result of urban development and other activities in the plan area and no comprehensive HCP would be implemented. In the absence of a comprehensive habitat conservation planning program, the needs of listed species would be addressed on a project-by-project basis, resulting in piecemeal planning that would likely establish smaller and more widely isolated patches of mitigation land scattered throughout the Basin. This alternative would not provide for the establishment and management of reserves designed to consolidate and improve habitat for the Covered Species. Also, species other than those federally listed would not derive the benefits of a regionally based approach, as would be facilitated through the NBHCP program.

VIII. DECISION

NEPA requires federal agency disclosure of the environmental effects of major federal actions significantly affecting the quality of the human environment. At the time of a decision, a federal agency is required to prepare a record of decision stating what the decision was, identifying the alternatives considered in reaching its decision, specifying the alternative which was considered to be environmentally preferable, discussing all relevant factors the agency used in making its decision, and stating whether all practicable means to avoid or minimize environmental harm from the selected alternative have been adopted, and if not, why not.

The Applicants' final NBHCP and alternatives have been fully described and evaluated in the Draft and Final NBHCP EIS/EIR. Based upon the review of the alternatives and their environmental consequences described in the Draft and Final EIS/EIR; the Applicants' Final NBHCP; the IA between the Service, City, Sutter, Conservancy, and CDFG; the Service's Biological/Conference Opinion; and the Service's Findings (all incorporated herein by reference), the decision of the Service is to adopt the NBHCP alternative and issue Permits to the City, Sutter, and Conservancy pursuant to section 10(a)(1)(B) of the ESA for the take of the endangered vernal pool tadpole shrimp and threatened giant garter snake, valley elderberry longhorn beetle, and vernal pool fairy shrimp, and 11 non-listed animal species in the event they become listed during the 50-year term of the Permits, and to extend assurances under the Service's "No Surprises" rule to each of the 22 species covered by the NBHCP.

IX. RATIONALE FOR DECISION

The Service adopted the final NBHCP alternative because it best meets the statutory criteria for issuance of a Section 10(a)(1)(B) Incidental Take Permit under the ESA (Service 2003c) as explained in detail in the Service's Findings. Implementation of the NBHCP will contribute to the maintenance of viable populations of the giant garter snake and Swainson's hawk in the basin for the foreseeable future, will contribute to the conservation of the other 20 species covered by the NBHCP and will minimize significant adverse environmental impacts to species and the habitats on which they depend while effectively mitigating unavoidable impacts to those species and habitats. A more detailed analysis of the effectiveness of the take minimization and mitigation measures provided under the NBHCP is contained in the Services' Section 7 Biological/Conference Opinion and Findings.

The decision to select the final NBHCP alternative, also rests in part, on the analysis presented in the EIS/EIR which compared the predicted environmental consequences of each of the alternatives against the No Action Alternative. Of the six alternatives analyzed in the EIR/EIS, the Service believes that the combination of land acquisition and habitat enhancement, management, and monitoring provided under the preferred alternative most effectively offsets the anticipated levels of take and the impacts of that take on the Covered Species and can be feasibly implemented by the permit Applicants. The Increased Mitigation, Habitat-Based, and Reserve Zones alternatives would significantly drive up the costs of plan implementation to a level likely to render the plan economically infeasible and are not necessary from a biological standpoint to offset the impacts of take likely to result from authorized development in the City and Sutter. The Reduced Take alternative would be inconsistent with the City's and Sutter's approved land use plans, would result in the establishment of less high quality habitat for the covered species, and would also likely raise plan implementation costs to a level that could impair the economic feasibility of the plan. The No Action alternative would result in piecemeal, scattered mitigation of far less value to the covered species than the interconnected system of managed, high quality habitat reserves to be established under the plan. The Service believes minimization and mitigation provided under the proposed alternative accurately reflects the level of take anticipated from authorized development in the City and Sutter analyzed in the EIR/EIS and the Biological/Conference Opinion, most effectively minimizes and mitigates the impacts of that take, and does so in a manner that can be feasibly implemented by both jurisdictions and the Conservancy. For these reasons, the Service's decision is to issue Section 10(a)(1)(B) permits to the City, Sutter County and the Conservancy in accordance with the Final NBHCP and IA.

This analysis evaluated the relative effects of the alternatives on other resources in the Natomas Basin, including biological resources, water quality, air quality, land use, cultural resources, and traffic/circulation. The degree to which these resources would be adversely affected was determined to be the same for four of the five alternatives as compared to the No Action Alternative. Under the Reduced Potential for Incidental Take Alternative, the total allowable development would be reduced by 5,500 acres. However, as stated in "The Alternatives" section, this alternative is neither biologically necessary nor, from the standpoint of the permit Applicants, practicable. The NBHCP alternative meets the statutory criteria for issuance of a Section 10(a)(1)(B) Incidental Take Permit under the ESA

and the Reduced Potential for Incidental Take Alternative would require higher mitigation fees that could impair the feasibility of the overall NBHCP.

Loss of 15,517 acres of existing or potential habitat will occur within the NBHCP project area as agricultural and vacant lands are converted to urban uses over the 50-year life of the Permits. The Service has determined that he Final NBHCP will effectively minimize and mitigate the direct and indirect adverse effects *through* the implementation of on-site minimization measures during project construction, 'and funding the establishment of a reserve network of *up* to 7,758.5 acres in perpetuity to be restored, enhanced, managed and monitored to benefit the covered species.

The NBHCP Alternative is the NEPA Preferred Alternative because this alternative effectively minimizes and mitigates the impacts of take of the covered species resulting from development of up to 15,517 acres of land within the project area currently planned for development by the City and Sutter. While the proposed alternative would result in mitigation fees near the upper level of feasibility, the other alternatives result in estimated fees that are even higher and would likely render the planned urban development infeasible. For example, the Habitat-based Mitigation Alternative was considered to be the environmentally preferable alternative because it would result in approximately twice the amount of mitigation lands as the proposed action, an approximate mitigation ratio of 1 to 1 that would result from that alternative would compromise the feasibility of planned development in the Basin. By adopting the Final N13HCP alternative with the minimization and mitigation measures, all practical means to avoid or minimize environmental harm from implementation of the selected alternative have been adopted.

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Deputy Manager

California-Nevada Operations Office

6/27/03

Date

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